

Appl. No. 10/605,882
Reply to Office action of January 31, 2008

REMARKS/ARGUMENTS

5 Request for Continued Examination:

The applicant respectfully requests continued examination of the above-indicated application as per 37 CFR 1.114.

1. Introduction

10 This is a full and timely response to the Office action of January 31, 2008. Claims 1, 4, 13, and 24 have been amended and rationale differentiating current claims over known references is presented. Claim amendments are supported at least by Paragraph [0026] and Fig.3 as filed. No new material has been introduced. The applicant respectfully requests continued examination of claims 1-34.

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2. Claim rejections

Claims 1-3, 12-15, 23-26, 29, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakaya (US 7006571 B1, hereinafter referred to as "6571"). Claims 4 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (US 7006571 B1, hereinafter referred to as "6571"). Claims 5-8, 16-19, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (US 7006571 B1, hereinafter referred to as "6571") as applied to claims 1-4, 12-15, 23-26, and 29 above, and further in view of Nakaya et al. (US 20010050957 A1, hereinafter referred to as "50957"). Claims 9, 20, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (US 7006571 B1, hereinafter referred to as "6571") and Nakaya et al. (US 20010050957 A1, hereinafter referred to as "50957") as applied to claims 1-8, 12-19, 23-26, and 29-31 above, and further in view of Srinivasan (US 20030202607 A1). Claims 10-11, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya (US 7006571 B1, hereinafter referred to as "6571") as applied to claims 1-4, 12-15, 23-26, and 29 above, and further in view of Hagiwara (US 20040223550 A1).

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Independent claims 1, 13, and 24 have each been amended to include limitations concerning a multiplexer receiving as input a global motion vector and a macroblock motion vector and outputting a selected motion vector, which is either the global motion
5 vector or the macroblock motion vector to the same interpolation unit for processing for outputting a predicted image. These limitations are supported at least by Paragraph [0026] and Fig.3 of the current specification.

During the prosecution of this application, somewhat related limitations in claims 4
10 and 25 have been rejected by the Examiner, for example in the bottom half of page 5 of the Office action dated 09/27/2007 concerning claim 4. The Examiner cites Fig.9 of Nakaya (6571) and suggests Fig.9 discloses a switch (element 908) selecting between global and block matching and that the components are contained within the motion compensation processor (element 616), which is itself a singular component of the
15 encoding apparatus (element 616).

First, the applicant would like to respectfully point out that Fig.9, element 616 is part of encoder, not a decoder as is claimed (Col.14, lines 35-37 and Col.12, lines 55-56), which as is known provides very real world differences in functionality.

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Perhaps more important is that cited element 616 does not read on the structural and functional limitations of the amended claims. Col.14, lines 39-45 of Nakaya (6571) state that motion compensation is respectively performed by the "global motion estimating unit 902 and the global motion compensation predicted image synthesizer 911" or by the
25 "block matching unit 905". This is understood as that if, as the Examiner states on Page 6 of the Office action dated 09/27/2007, Nakaya (6571) teaches performing interpolation, there must be at least two different interpolation units, one in the "global motion estimating unit 902 and the global motion compensation predicted image synthesizer 911" and a different one in the "block matching unit 905", thus the global motion vector and
30 the block matching vector are not selectively routed from the multiplexer (switch element

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908) to the same interpolation unit as is claimed. In fact, according to Col.14, lines 48-58 and related Fig.9 and Fig.6, the respective motion vectors 904 and 907 are routed to the multiplexer 910. The multiplexer 910 then may output the "motion information 620", which as can be seen in related Fig.6, is received by a second multiplexer 622, where the
5 motion information 620 may be selected to be output as part of "an H261 encoded bit stream 623" (Col.13, lines 38-41). Thus the applicant respectfully asserts that motion vectors are output neither to the switch 908 as suggested in the Office action dated 09/27/2007, nor to the alleged interpolation units.

10 On the other hand, the current claims state that the multiplexer takes the motion vectors as inputs, selects one of the inputted motion vectors, and outputs the selected motion vector to the same interpolation unit, structural and function limitation not found in known art.

15 The applicant furthermore retains all rights of rebuttal concerning any and all other claim rejections found in this previous Office actions, but as it is believed that all independent claims should be found allowable at this point, refrains from currently voicing them in the interest of simplifying prosecution of this application.

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3. Summary

The claimed limitation is not met by known references and provides a real world difference of requiring only a single interpolation unit to decode frames regardless whether global motion compensation or matching block compensation was used during
25 the encoding process, saving costs. The inventive step includes using a switch to selectively route appropriate motion vectors to a single interpolation unit for processing.

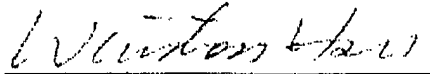
For at least the reason that the allowability of dependent claims ultimately depends upon the allowability of their respective base claims, and the respective base claims have
30 been shown to differ structurally and functionally from known references and are now

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believed to be allowable by the applicant, all dependent claims are also believed to be allowable. Therefore, reconsideration of claims 1-34 is respectfully requested.

Sincerely yours,

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